

# *Gulf Cooperation Council*

## EDICT OF GOVERNMENT

In order to promote public education and public safety, equal justice for all, a better informed citizenry, the rule of law, world trade and world peace, this legal document is hereby made available on a noncommercial basis, as it is the right of all humans to know and speak the laws that govern them.

GSO 2102 (2009) (English): Cinnamon : Sri Lankan type, Seychelles type and Madagascan type  
(*Cinnamomum zeylanicum* Blume) - Specification (Draft Standard)

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# يئة التقيوي يهل سل التعبون لذول الخليج العربيه GCC STANDARDIZATION ORGANIZATION (GSO)

مشروع وهب ئي

GSO 5/FDS/ISO 6539:2009 (E)  
ISO 6539:1997

الرفة) لانس يه ( : الى على سيري يكي ، الى على ميش لي ، الى على غشقي ري -  
الاصناف بت

Cinnamon : Sri Lankan type, Seychelles type and Madagascan type  
(Cinnamomum zeylanicum Blume) - Specification

إعداد  
راه جلق فئت راخ هيج نق طاع اخ ج ب ثلن غلط توطرس اع

ه زان هق تي شش وع ئى افيت قسرت خه جت حى جوزيعه بذاء ارش اى وان هج طب ثب ش اهب ، زنن لئف ائب شضرت  
نخ غش ورنج دم ، ولا جج رنلش حى لئب لئى افيت قسرت خه جت الا بعدا جج دهب يي ج هس ائلس ان هجت .

سقى اخ ص فاند ون : 67.220.10

**Cinnamon : Sri Lankan type,  
Seychelles type and Madagascan  
type (Cinnamomum zeylanicum  
Blume) - Specification**

قرفة (الأنس يه) : إلى عل سيلونيكي ،  
إلى جال ميشلي ، إلى ع الم غ شقري -  
الوصف بت

**Date of approval:**  
**Legal status:**

تبيخ ا. محمد:  
صفة الإصدار:

هَيْتَ رَاخِي سِنْدُولِي جَهْس رَاخِي وَتَوُ نَدُول رَاخِي هَلْ غَيْبِي هَيْتَ لَهْ يَتَحْ لَهْفَهْ عَ لَهْ خُجَا جَهْسَه رَايِ قُتْ  
نَهْ اَهْصِيْثْ وَوُزْبُ س فَآ دُول رَاخِي هَلْ الْعِيْثْ ، وَي يَهْبُو اَنْهَيْتْ اِذَا نَايِ اَهْصِيْبْ لَقِيْ سِرْتِ رَاخِي جَهْصِيْ اَسْطَتْ  
نَجَبُيْتْ يَخْصَصَتْ .

وقد نبى ج حيث انقى من نذول يجمع من ان تعاو نذول لانه ه العيت ض ب ش بى ه عمل راه ج لى ف ت سرقى 5  
 لاه ج لى ف ت لانه ج تى ق ط عى اى اى بى ت اى ج ب ث ان غ ط ت روط رى ا ع ت ا ب خ ب ا ن اى بى ت لى ق بى س ت ل ذون ت سرقى  
 أض و 1997/6539 "شوقت اى س س ( : لى ع ن س ش ه ك ، ا نى ع ن س ش ه ، ا نى ع ا ن ع ش ق ش ي -  
 اى اى ف ب ث " ول خ اى ن ج ه ب " ا ن ط ت ن ذون ت ع ت ق س " و ح ج ح ش ج ب ا ن اى اف غ ت العى ق بى ج ي ه ل ك ت  
 ا ن ح ش ب ا ع ذ لى ش ش و ع ه ز ا ن اى اى بى ت .

وقَدْ اعْخَذْتُ فِي الْمَرْءِ فَتَ لَكَيْ أَصِفْتُ (قِسْرَتُ / لَأُحَقِّقُ) خَهْ جَتِي إِذْ خَبَلَ بَعْضُ رِجَالِ عَدِيلِ الْإِسْلَامِ بِتَغْيِينِهِ:

- اِضْفَيْتْ عَذْيَ اِنَّيْ اَهْوِيْبْ لِنَقِيْسَتْ لَخْهْ جِيْةَ عَلِيْبْ دُنْ لَّشْ اِجْ غَنْ خُ كُ وِيْتْ.
- اِضْفَيْتْ عَوَايِمَ لَشْ يَتَوَانْ خِيْ وَدَاخْ هَفْ اِلْكَبْ اِكْ عَلَيَا بْ دُ 11) اِنْ هَقْ اُضْ اِنَّيْ اَهْوِيْبْ لَنَوِيْتْ).

ورقة الغصة / اجنبا عي جغتس ابللة ال هوقسرق ( ) ، لقي قوة نجس / / هة ، ان علق /

Standardization Organization for GCC (GSO) is a regional Organization which consists of the National Standards Bodies of GCC member States. One of GSO main functions is to issue Gulf Standards /Technical regulation through specialized technical committees (TCs).

GSO through the technical program of committee TC No.5: " Gulf technical committee for Food & Agricultural standards " has adopted the International Standard No. : ISO 6539/1997 "Cinnamon : Sri Lankan type, Seychelles type and Madagascan type (*Cinnamomum zeylanicum* Blume) - Specification" issued by (International Organization for Standardization) and has been translated to Arabic language. The Draft Standard has been prepared by (Kingdom of Bahrain)

This standard has been approved as Gulf (Standard / Technical Regulation) with some technical modifications as follows:

- The addition of several Gulf standards under complementary references section.
- The addition of moisture, contamination and mechanical spoilage under clause no. 11 (Annex A in the International standard.

by GSO Board of Directors in its meeting No..../..... held on    /    /    H,    /    /    G

## **Cinnamon : Sri Lankan type, Seychelles type and Madagascan type (Cinnamomum zeylanicum Blume) – Specification**

### **1 Scope:**

This standard specifies requirements for whole or ground (powdered) cinnamon of the Sri Lankan type, Madagascan type and Seychelles type, which is the bark of the tree or shrub *Cinnamomum zeylanicum* Blume.

*NOTE — Requirements for cassia (Chinese type, Indonesian type and Vietnamese type) are given in GSO/ISO 6538).*

### **2 Complimentary references:**

- 2/1 GSO 9 ~~Labeling of prepackaged foodstuffs~~"
- 2/2 GSO 150 ~~Expiration of food product~~"
- 2/3 GSO 21 ~~Hygienic regulations for food plants and their personnel~~"
- 2/4 GSO 22 ~~Methods of test for coloring matter used in foodstuffs~~"
- 2/5 GSO 382 ~~Maximum limits of pesticide residues in agricultural and food products – Part 1~~"
- 2/6 GSO 383 ~~Maximum limits of pesticide residues in agricultural and food products – Part 2~~"
- 2/7 GSO 841 ~~Maximum limits of mycotoxins permitted in foods and animal feeds – aflatoxins~~"
- 2/8 GSO 1016 ~~Microbiological criteria for foodstuffs – Part 1~~"
- 2/9 GSO 988 ~~Limits of radioactivity levels permitted in foodstuffs – Part 1~~"
- 2/10 GSO 1323 ~~Cereals and pulses – Determination of hidden insect infestation – Part 3: Reference method~~"
- 2/11 GSO/ISO 928 ~~Spices and condiments - Determination of total ash~~"
- 2/12 GSO/ISO 930 ~~Spices and condiments - Determination of acid-insoluble ash~~"
- 2/13 GSO/ISO 948 ~~Spices and condiments - Sampling~~"
- 2/14 GSO/ISO 1208 ~~Spices and condiments - Determination of filth~~"
- 2/15 GSO/ISO 2825 ~~Spices and condiments - Preparation of a ground sample for analysis~~"
- 2/16 GSO/ISO 6571:1984, Spices, condiments and herbs — Determination of volatile oil content"<sup>1</sup>
- 2/17 GSO/ISO 927 ~~Spices and condiments — Determination of extraneous matter content~~"<sup>2</sup>

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<sup>1</sup> Will be published by GSO in the future.

<sup>2</sup> Will be published by GSO in the future.

2/18 GSO/ISO 939 –Spices and condiments - Determination of moisture content — Entrainment Method”<sup>3</sup>

### 3 Definitions:

**3/1 cinnamon quills** (full tubes): Scraped peel of the inner bark of mature plantation cinnamon shoots joined together by overlaps, the hollow of which has been filled with small pieces of the same peel and thereafter dried in the sun after air curing.

**3/2 cinnamon quillings** (broken tubes): Broken pieces and splits of varying sizes of all grades of cinnamon quills.

**3/3 cinnamon featherings**: Pieces of inner bark, obtained by peeling and/or scraping the bark of small twigs and stalks of plantation cinnamon shoots, which may include a quantity of chips as specified.

**3/4 cinnamon chips**: Dried unpeelable bark of plantation cinnamon, inclusive of the outer bark, which has been obtained by beating or scraping the shoots.

**3/5 ground cinnamon**: Powder obtained by grinding cinnamon of the types considered in this International Standard, excluding all additives.

**3/6 whole cinnamon**: All commercial forms of cinnamon except cinnamon powder.

**3/7 foxing**: The occurrence of reddish-brown patches on the surface of the quills, which may become dark brown with time.

**3/8 bale**: A package of any one particular grade of quills wrapped in a suitable material for export purposes.

### 4 Types and classification:

#### 4/1 Types

##### 4/1/1 Sri Lankan type cinnamon:

This is the dried bark of cultivated varieties of the species *Cinnamomum zeylanicum* Blume of the Lauraceae family.

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<sup>3</sup> Will be published by GSO in the future.

Sri Lankan type cinnamon is produced in four forms:

- 4/1/1/1 quills.
- 4/1/1/2 quillings.
- 4/1/1/3 featherings.
- 4/1/1/4 chips.

#### **4/1/2 Seychelles type cinnamon:**

This is the bark of trunks or branches of *Cinnamomum zeylanicum* Blume, cultivated on the Seychelles.

Seychelles type cinnamon is produced in three forms:

4/1/2/1 rough cinnamon bark, which consists of slightly curved, elongated, irregular, medium or small pieces of the whole unscraped bark.

4/1/2/2 scraped cinnamon bark, which is obtained from younger shoots from bushes of the same species; the shoots are scraped with a curved knife before the bark is detached from the wood;

4/1/2/3 quills and quillings, which are prepared from the young shoots, of bushes in a way similar to that used for Sri Lankan type cinnamon.

#### **4/1/3 Madagascan type cinnamon**

This is the bark of trunks or branches of *Cinnamomum zeylanicum* Blume, which grows wild on Madagascar. It is produced either:

4/1/3/1 in the form of simple, hollow tubes of unscraped or scraped bark, about 30 cm long, cut from smaller branches with a knife; or more usually

4/1/3/2 in the form of unscraped or scraped pieces of bark from the larger branches and trunks, broken off with the flat side of a hatchet.

### **4.2 Commercial grades**

#### **4/2/1 Sri Lankan type cinnamon:**

##### **4/2/1/1 Quills**

For classification, see table 1.



**4/2/1/2 Quillings**

Quillings may contain up to 3 % (m/m) of featherings and chips.

**4/2/1/3 Featherings**

Featherings may contain up to 5 % (m/m) of chips.

**4/2/1/4 Chips**

Chips shall consist of well dried and unpeelable cinnamon bark.

**4/2/2 Seychelles type and Madagascan type cinnamon:**

For classification, see table 2.

**5 Ground cinnamon**

Ground cinnamon shall consist solely of the types of cinnamon listed in clause 4.

Table 1 — Classification for quills for Sri Lankan type cinnamon

| Commercial designation of grades and qualities | Diameter of quills | Number of whole quills (1 050 mm) per kg | Extent of foxing | Minimum length of quills in a bale | Pieces of tube and broken pieces of the same quality per bale |
|--|--------------------|--|------------------|------------------------------------|---|
|  | max.<br>mm         | min.                                     | max.<br>%        | mm                                 | max.<br>% ( m/m)  |
| Alba   | 6                  | 45                                       | Nil              | 200                                | 1   |
| Continental                                    |                    |  |                  |                                    |   |
| C 00000 Special                                | 6                  | 35                                       | 10               | 200                                | 1   |
| C 00000  | 10                 | 31                                       | 10               |                                    |   |
| C 0000   | 13                 | 24                                       | 10               |                                    |   |
| C 000  | 16                 | 22                                       | 15               |                                    |   |
| C 00   | 17                 | 20                                       | 20               |                                    |   |
| C 0  | 19                 | 18                                       | 25               |                                    |   |
| Mexican  |                    |  |                  |                                    |   |
| M 00000 Special                                | 16                 | 22                                       | 50               | 200                                | 2   |
| M 00000  | 16                 | 22                                       | 60               |                                    |   |
| M 0000   | 19                 | 18                                       | 60               |                                    |   |
| Hamburg  |                    |  |                  |                                    |   |
| H1   | 23                 | 11                                       | 25               | 150                                | 3   |
| H2   | 25                 | 9  | 40               |                                    |   |
| H3   | 38                 | 7  | 65               |                                    |   |

Table 2 — Classification of Seychelles type and Madagascan type cinnamon

| Commercial designation of the grade | Physical characteristics of the bark   |
|-------------------------------------|--|
| 1 Whole tubes (full tubes)          | Tubes of length about 15 cm and bark thickness up to 1 mm  |
| 2 Pieces of scraped bark            | Broken pieces, rough and grooved scraped bark of thickness up to 2 mm  |
| 3 Pieces of unscraped bark          | Broken pieces, rough and grooved, of width up to about 3 cm and length up to 20 cm. The bark can be up to 5 mm thick |
| 4 Chips, flakes of unscraped bark   | Small pieces of unscraped bark of cinnamon stems   |

## **6 Requirements:**

### **6/1 Odour and flavour:**

The odour and flavour shall be fresh and characteristic of cinnamon of the origin concerned. It shall be free from foreign flavours, including mustiness.

### **6/2 Colour:**

Ground cinnamon shall be yellowish to reddish-brown in colour.

### **6/3 Freedom from moulds, insects, etc.:**

Whole cinnamon shall be free from live insects, mould growth, mites and insect remains, for example cocoons, and shall be practically free from dead insects, insect fragments and rodent contamination visible to the naked eye.

### **6/4 Extraneous matter:**

Extraneous matter includes leaves stems, chaff and other vegetable matter together with sand, earth and dust.

The proportion of extraneous matter in whole cinnamon shall not exceed 1 % (m/m) when determined by the method described in clause 2/17.

### **6/5 Chemical requirements:**

Whole cinnamon and ground cinnamon shall comply with the requirements given in table 3.

## **7 Sampling:**

Sampling shall be carried out as specified in clause 2/13.

## **8 Test methods:**

8/1 The samples shall be analysed by the methods of analysis as specified in 2/10, 2/14, 2/17 and in table 3.

Table 3 — Chemical requirements

| Characteristic                                  | Requirements              |   | Test method              |
|---|---------------------------|---|--------------------------|
|   | Cinnamon, Sri Lankan type | Cinnamon, Seychelles type and Madagascan type |                          |
| Moisture content, % ( m/m) max.                 |                           |   |                          |
| - whole cinnamon                                | 14                        | 15  | According to clause 18/2 |
| - ground cinnamon                               | 12                        | 14  |                          |
| Total ash, % ( m/m) on dry basis, max.          | 5                         | 7   | According to clause 11/2 |
| Acid-insoluble ash, % ( m/m) on dry basis, max. | 1                         | 2   | According to clause 12/2 |
| Volatile oils, ml/100 g, on dry basis, min.     |                           |   |                          |
| - whole cinnamon                                | 1.0                       | 0.7   | According to clause 16/2 |
| - ground cinnamon                               | 0.7                       | 0.3   |                          |

8/2 For the preparation of a ground sample for analysis, coarsely crush the product until particles of 5 mm or less are obtained, before applying the general method described in clause 2/15.

## **9 Packaging**

Whole cinnamon shall be packed in clean, sound and dry containers made of a material which does not affect the product but which protects it from the ingress of moisture.

## **10 Marking**

Without prejudice to what is stated in the Gulf standard mentioned in item 2/1 and 2/2, the following shall be included in the label:

- 10/1 name of the product.
- 10/2 trade name or brand name.
- 10/3 name and address of the manufacturer or packer.
- 10/4 batch number.
- 10/5 net mass.
- 10/6 grade of the product.
- 10/7 producing country.
- 10/8 harvest date (month – year).

## **11 Transport and storage:**

11/1 The containers should be so handled and transported that they are protected from the rain, from the sun or other source of excessive heat, from objectionable odours, from contamination and mechanical spoilage.

11/2 The store room should be dry, free from objectionable odours, proofed against entry of insects and vermin and well protected from the sun, rain and excessive heat. The ventilation should be controlled.